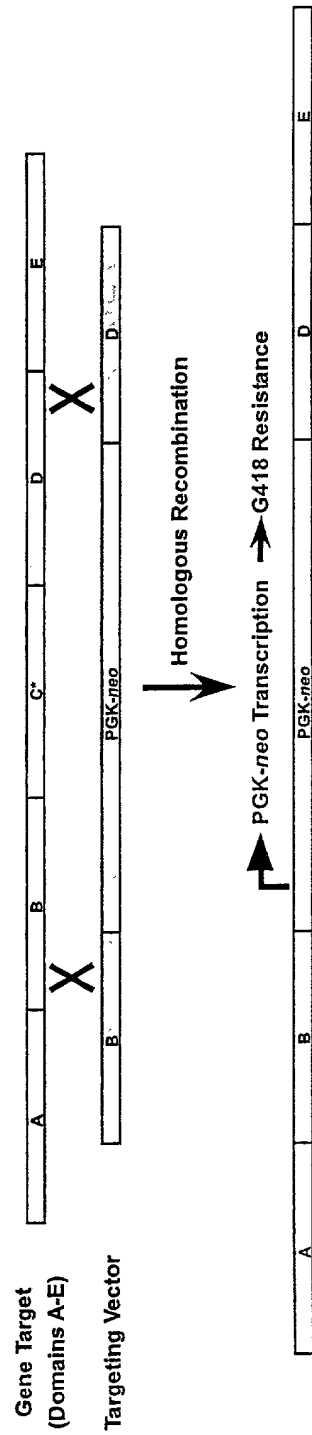
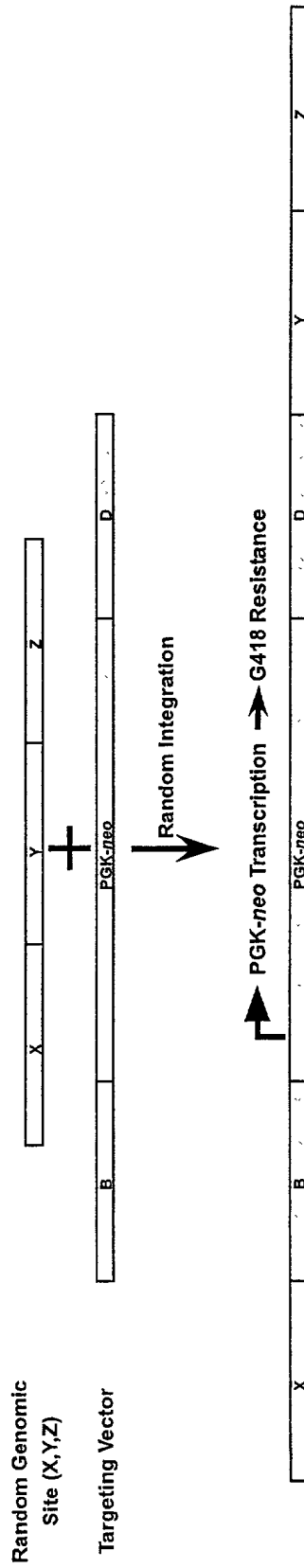


**Figure 1**

# A. Homologous Recombination: G418 Resistance. Targeting Vector Flanked by "A" and "E"



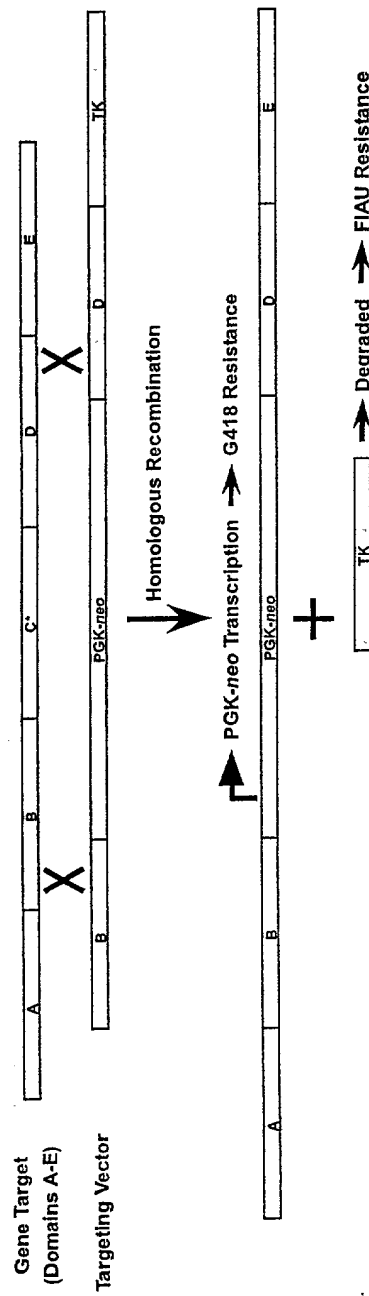
# B. Random Integration: G418 Resistance. Targeting Vector Flanked by "X" and "Y"



DISTINGUISH EVENTS BY SCREENING MOLECULARLY (PCR & SOUTHERN)

Figure 2

## A. Homologous Recombination: G418 Resistance + FIAU Resistance



## B. Random Integration: G418 Resistance + FIAU Sensitivity

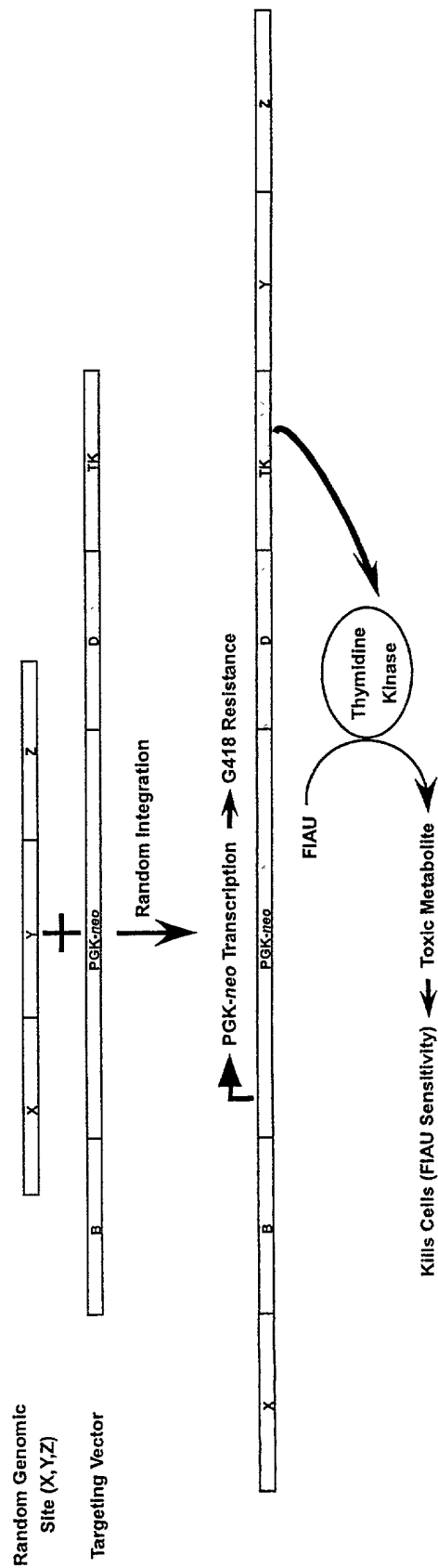


Figure 3

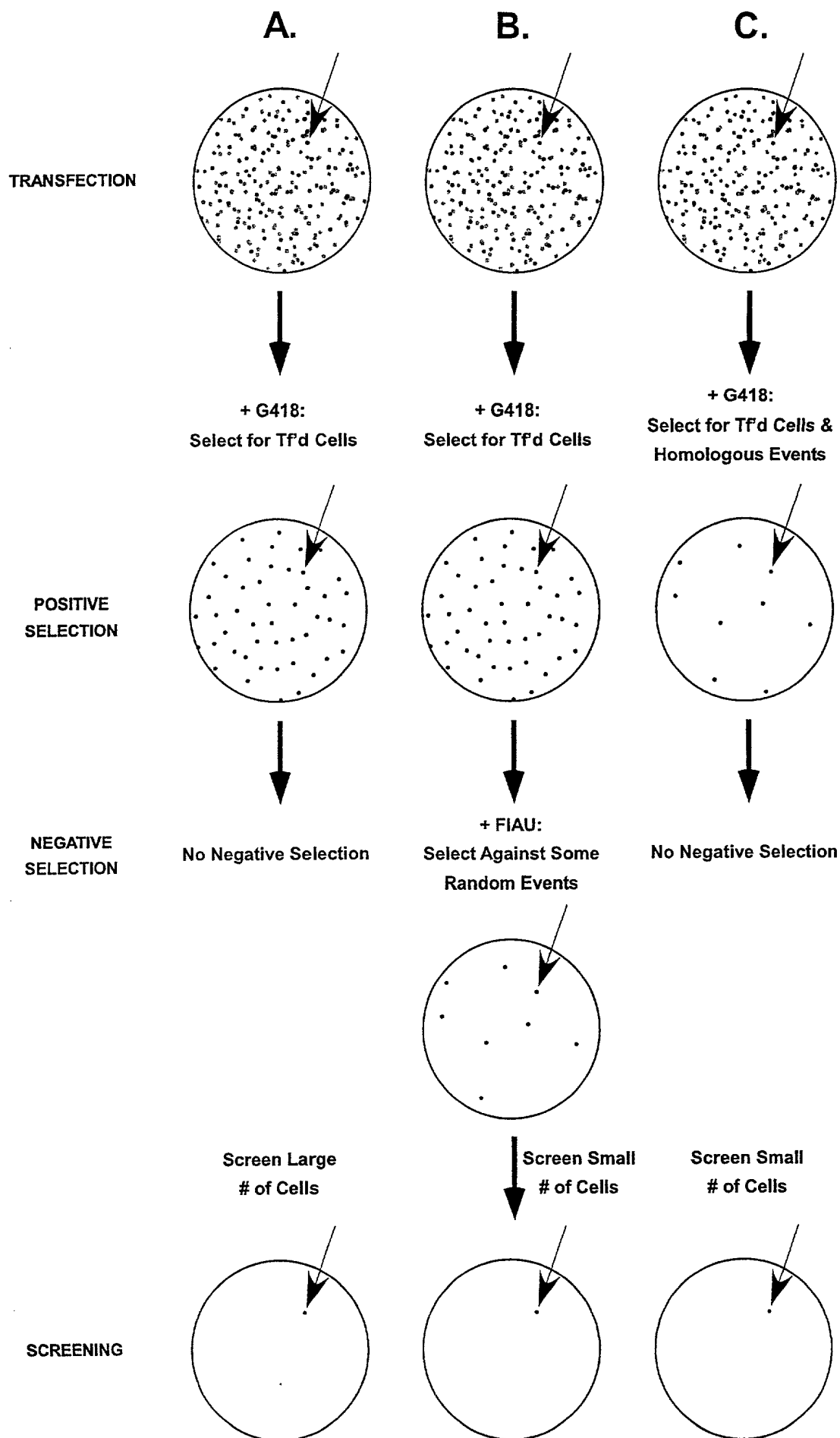
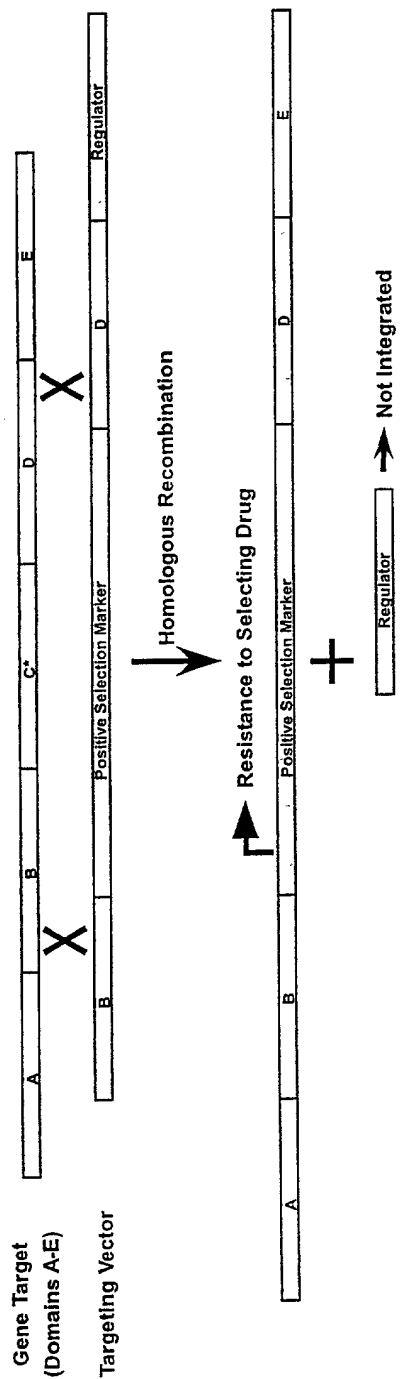


Figure 4

# **A. Homologous Recombination: Resistance to Selecting Drug**



# **B. Random Integration: Sensitivity to Selecting Drug**

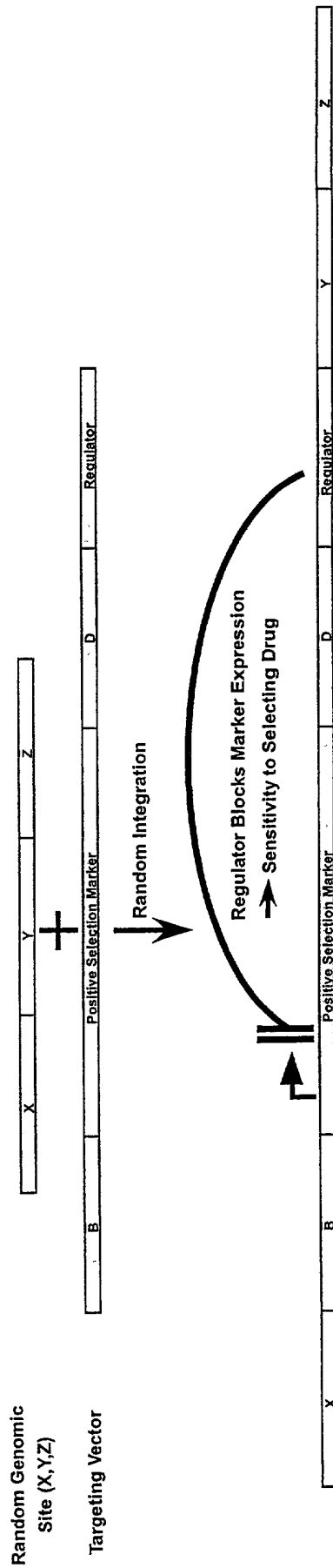
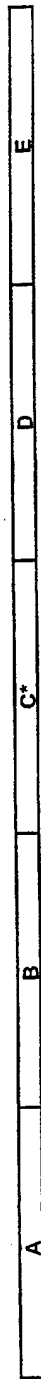


Figure 5

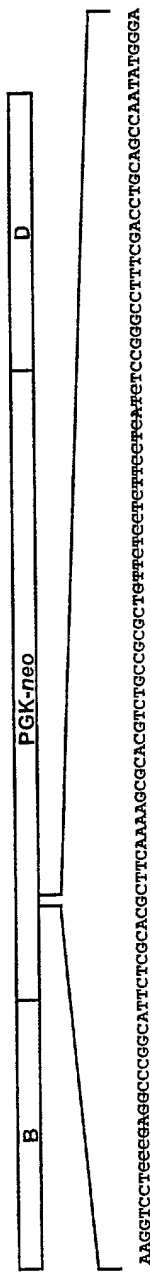
**C3406:**

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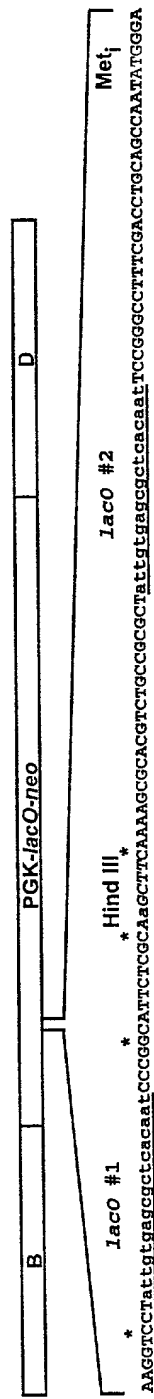
**Figure 6A**



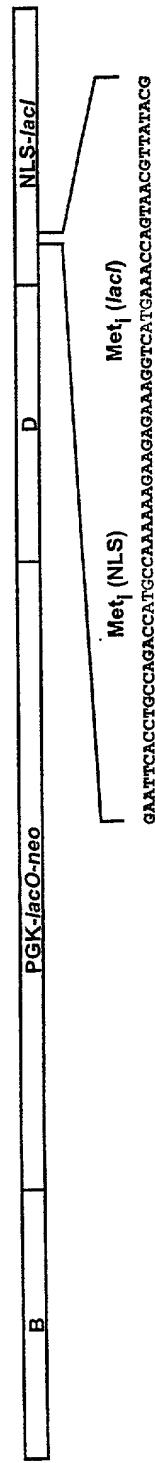
**C.**



**D.** Targeting Vector:  
PGK-lacO-neo

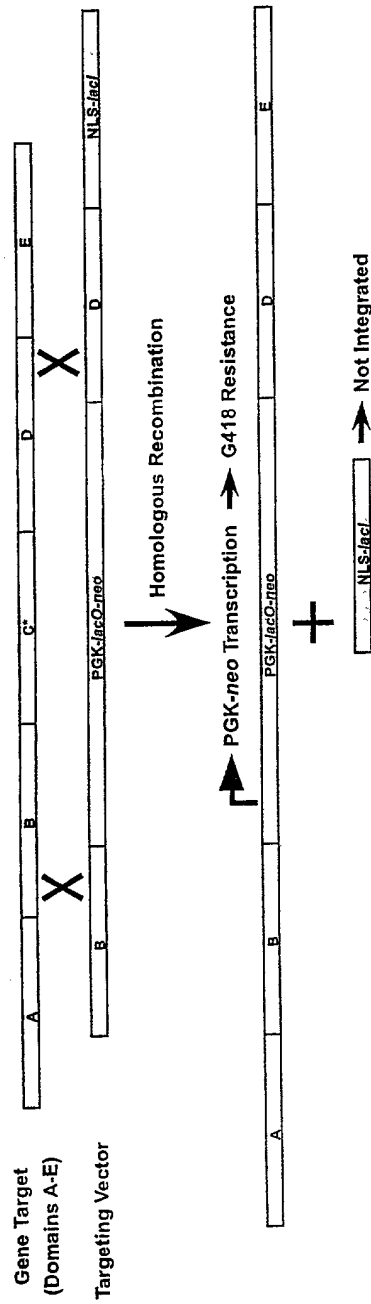


**E.** Targeting Vector:  
PGK-*lacO-neo*  
+ NLS-*lacI*



**Figure 6 B-E**

# **A. Homologous Recombination: G418 Resistance**



# **B. Random Integration: G418 Sensitivity**

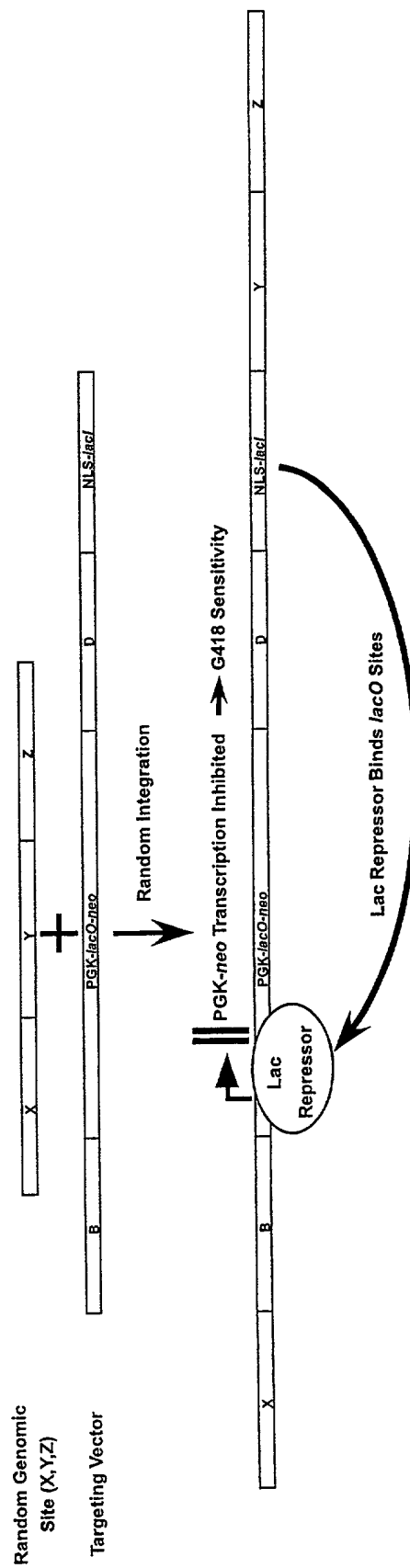


Figure 7



<u>Oligo #</u>	<u>Sequence (5' to 3')</u>
10164	CGGAATTCACCTGCCAGACCATGCCAAAAAGAAGAGAAAGGTCATGAAACCAGTAACGTTATACG
10165	CGGAATTCTCACTGCCCCGCTTTCCAGTCG
10218	GCATTCTCGCAAGCTTCAAAAGCGCACGTCTGCCGCGCTATTGTGAGCGCTCACAATTCGGGCCTTTCGACCTG
9959	TCATCAATTTCTGCAGAC
10219	TGCGCTTTTGAAGCTTGCGAGAATGCCGGGATTGTGAGCGCTCACAATAGGACCTTCGCGCCCGCC
4201	CAGGAAACAGCTATGAC

0944-0944  
T0450"0944

Figure 8

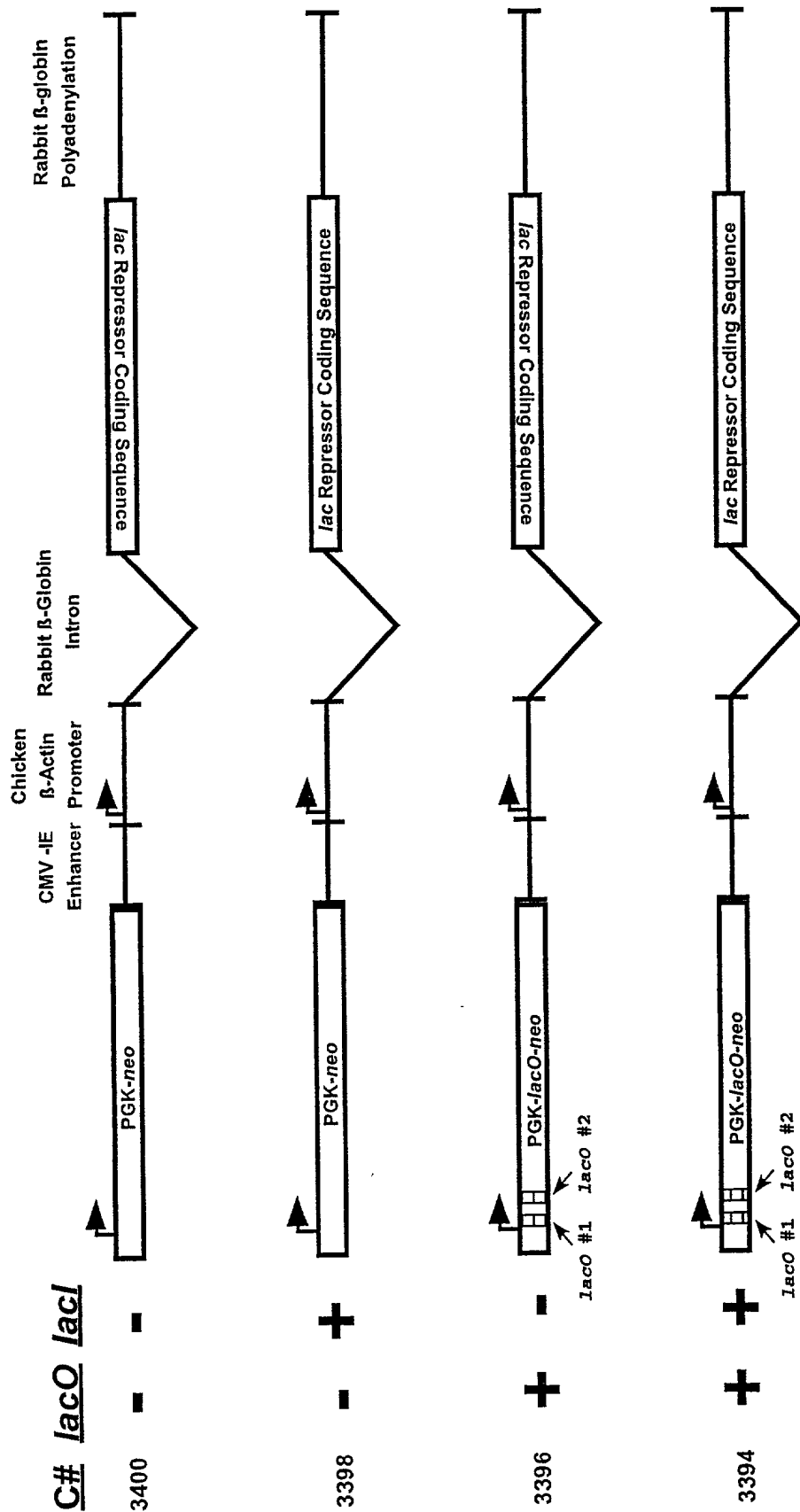


Figure 9

09443070  
T04T60" E3445660

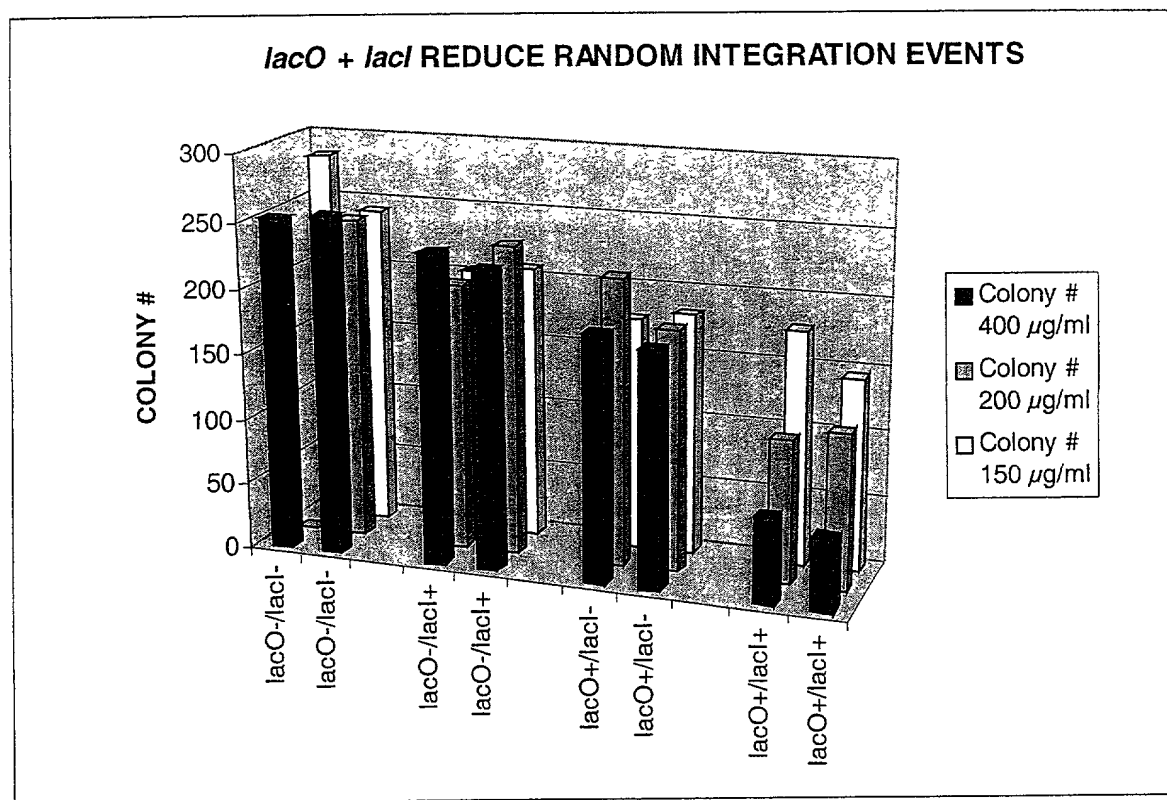


Figure 10

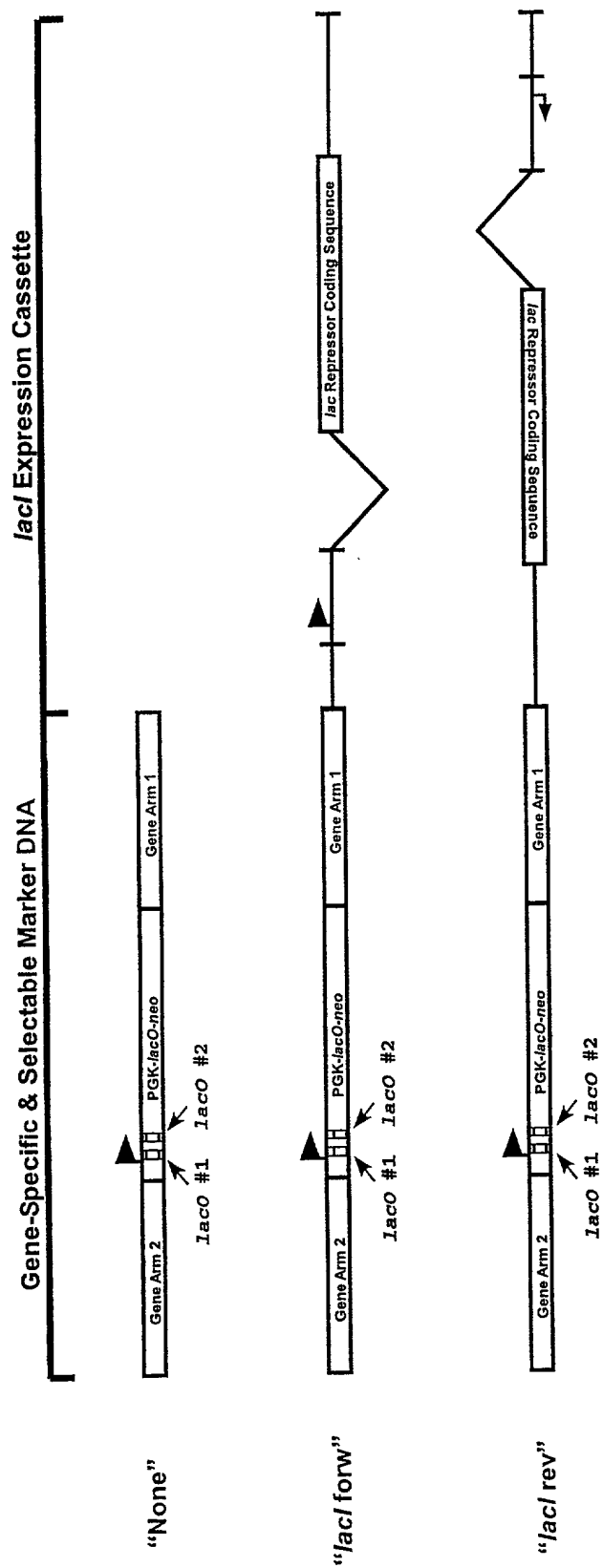


Figure 11

## Homologous Recombinant Recovery Rate

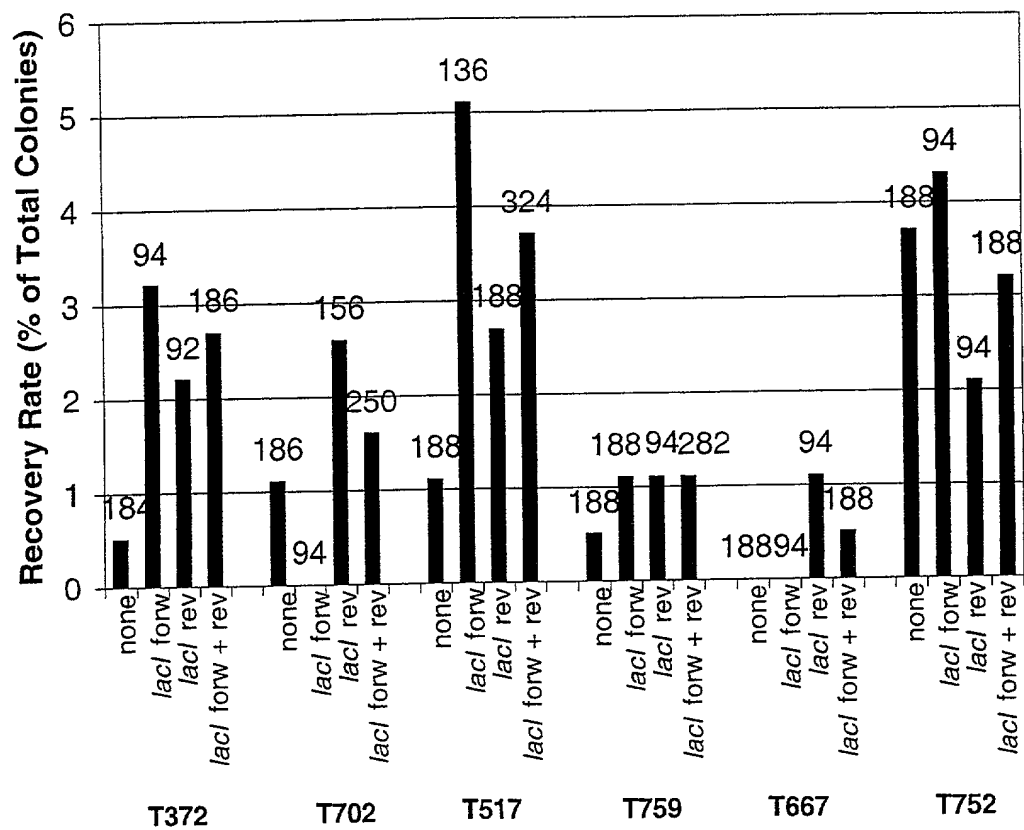


Figure 12

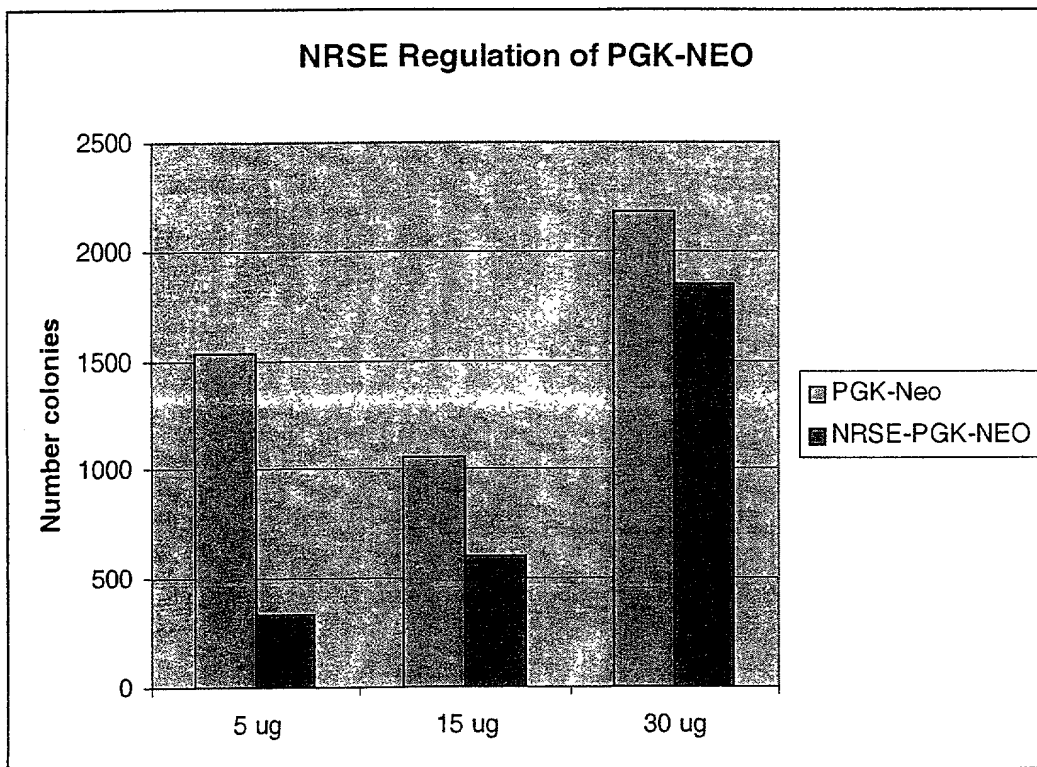


FIGURE 13

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Fig. 14A

ATGGCGAATGGCGCTTCGCTTGGTAATAAAGCCCGCTTCGGCGGGCTTTTTTTTGGTTAA  
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Fig. 14B